

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/550,518
Source: PTI/10
Date Processed by STIC: 10/5/05

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PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/550,518

DATE: 10/05/2005

TIME: 16:22:40

Input Set : A:\sequence listing ascii.txt
 Output Set: N:\CRF4\10052005\J550518.raw

3 <110> APPLICANT: Cytos Biotechnology AG
 4 Maurer, Patrik
 5 Bachmann, Martin
 6 Proba, Karl
 7 Meijerink, Edwin
 8 Manolova, Vania
 10 <120> TITLE OF INVENTION: Packaging of Immunostimulatory Substances into Virus-like
 11 Particles: Method of Preparation and Use
 13 <130> FILE REFERENCE: 1700.0630000
 C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/550,518
 C--> 15 <141> CURRENT FILING DATE: 2005-09-23
 15 <150> PRIOR APPLICATION NUMBER: 60/457,348
 16 <151> PRIOR FILING DATE: 2003-03-26
 18 <160> NUMBER OF SEQ ID NOS: 111
 20 <170> SOFTWARE: PatentIn version 3.2
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 10
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Artificial sequence
 27 <220> FEATURE:
 28 <223> OTHER INFORMATION: oligonucleotide ISS
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 40 <223> OTHER INFORMATION: oligonucleotide G3-6
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 46 <210> SEQ ID NO: 3
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 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: oligonucleotide G4-6
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 59 <211> LENGTH: 21
 60 <212> TYPE: DNA
 61 <213> ORGANISM: Artificial sequence

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63 <220> FEATURE:
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72 <212> TYPE: DNA
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85 <213> ORGANISM: Artificial sequence
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102 <400> SEQUENCE: 7
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107 <211> LENGTH: 28
108 <212> TYPE: DNA
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131 <211> LENGTH: 132
132 <212> TYPE: PRT
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137 Ala Lys Leu Glu Thr Val Thr Leu Gly Asn Ile Gly Lys Asp Gly Lys
 138 1 5 10 15
 141 Gln Thr Leu Val Leu Asn Pro Arg Gly Val Asn Pro Thr Asn Gly Val
 142 20 25 30
 145 Ala Ser Leu Ser Gln Ala Gly Ala Val Pro Ala Leu Glu Lys Arg Val
 146 35 40 45
 149 Thr Val Ser Val Ser Gln Pro Ser Arg Asn Arg Lys Asn Tyr Lys Val
 150 50 55 60
 153 Gln Val Lys Ile Gln Asn Pro Thr Ala Cys Thr Ala Asn Gly Ser Cys
 154 65 70 75 80
 157 Asp Pro Ser Val Thr Arg Gln Ala Tyr Ala Asp Val Thr Phe Ser Phe
 158 85 90 95
 161 Thr Gln Tyr Ser Thr Asp Glu Glu Arg Ala Phe Val Arg Thr Glu Leu
 162 100 105 110
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 169 Asn Pro Ala Tyr
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 173 <210> SEQ ID NO: 11
 174 <211> LENGTH: 328
 175 <212> TYPE: PRT
 176 <213> ORGANISM: Bacteriophage Q-beta
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 184 Lys Gln Thr Leu Val Leu Asn Pro Arg Gly Val Asn Pro Thr Asn Gly
 185 20 25 30
 188 Val Ala Ser Leu Ser Gln Ala Gly Ala Val Pro Ala Leu Glu Lys Arg
 189 35 40 45
 192 Val Thr Val Ser Val Ser Gln Pro Ser Arg Asn Arg Lys Asn Tyr Lys
 193 50 55 60
 196 Val Gln Val Lys Ile Gln Asn Pro Thr Ala Cys Thr Ala Asn Gly Ser
 197 65 70 75 80
 200 Cys Asp Pro Ser Val Thr Arg Gln Ala Tyr Ala Asp Val Thr Phe Ser
 201 85 90 95
 204 Phe Thr Gln Tyr Ser Thr Asp Glu Glu Arg Ala Phe Val Arg Thr Glu
 205 100 105 110
 208 Leu Ala Ala Leu Leu Ala Ser Pro Leu Leu Ile Asp Ala Ile Asp Gln
 209 115 120 125
 212 Leu Asn Pro Ala Tyr Trp Leu Leu Ile Ala Gly Gly Ser Gly Ser
 213 130 135 140
 216 Lys Pro Asp Pro Val Ile Pro Asp Pro Pro Ile Asp Pro Pro Pro Gly
 217 145 150 155 160
 220 Thr Gly Lys Tyr Thr Cys Pro Phe Ala Ile Trp Ser Leu Glu Glu Val
 221 165 170 175
 224 Tyr Glu Pro Pro Thr Lys Asn Arg Pro Trp Pro Ile Tyr Asn Ala Val
 225 180 185 190
 228 Glu Leu Gln Pro Arg Glu Phe Asp Val Ala Leu Lys Asp Leu Leu Gly
 229 195 200 205

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232 Asn Thr Lys Trp Arg Asp Trp Asp Ser Arg Leu Ser Tyr Thr Thr Phe
 233 210 215 220
 236 Arg Gly Cys Arg Gly Asn Gly Tyr Ile Asp Leu Asp Ala Thr Tyr Leu
 237 225 230 235 240
 240 Ala Thr Asp Gln Ala Met Arg Asp Gln Lys Tyr Asp Ile Arg Glu Gly
 241 245 250 255
 244 Lys Lys Pro Gly Ala Phe Gly Asn Ile Glu Arg Phe Ile Tyr Leu Lys
 245 260 265 270
 248 Ser Ile Asn Ala Tyr Cys Ser Leu Ser Asp Ile Ala Ala Tyr His Ala
 249 275 280 285
 252 Asp Gly Val Ile Val Gly Phe Trp Arg Asp Pro Ser Ser Gly Gly Ala
 253 290 295 300
 256 Ile Pro Phe Asp Phe Thr Lys Phe Asp Lys Thr Lys Cys Pro Ile Gln
 257 305 310 315 320
 260 Ala Val Ile Val Val Pro Arg Ala
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 265 <211> LENGTH: 362
 266 <212> TYPE: PRT
 267 <213> ORGANISM: BK virus
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 272 1 5 10 15
 275 Lys Pro Lys Glu Pro Val Gln Val Pro Lys Leu Leu Ile Lys Gly Gly
 276 20 25 30
 279 Val Glu Val Leu Glu Val Lys Thr Gly Val Asp Ala Ile Thr Glu Val
 280 35 40 45
 283 Glu Cys Phe Leu Asn Pro Glu Met Gly Asp Pro Asp Asp Asn Leu Arg
 284 50 55 60
 287 Gly Tyr Ser Gln His Leu Ser Ala Glu Asn Ala Phe Glu Ser Asp Ser
 288 65 70 75 80
 291 Pro Asp Arg Lys Met Leu Pro Cys Tyr Ser Thr Ala Arg Ile Pro Leu
 292 85 90 95
 295 Pro Asn Leu Asn Glu Asp Leu Thr Cys Gly Asn Leu Leu Met Trp Glu
 296 100 105 110
 299 Ala Val Thr Val Lys Thr Glu Val Ile Gly Ile Thr Ser Met Leu Asn
 300 115 120 125
 303 Leu His Ala Gly Ser Gln Lys Val His Glu Asn Gly Gly Lys Pro
 304 130 135 140
 307 Val Gln Gly Ser Asn Phe His Phe Phe Ala Val Gly Gly Asp Pro Leu
 308 145 150 155 160
 311 Glu Met Gln Gly Val Leu Met Asn Tyr Arg Thr Lys Tyr Pro Gln Gly
 312 165 170 175
 315 Thr Ile Thr Pro Lys Asn Pro Thr Ala Gln Ser Gln Val Met Asn Thr
 316 180 185 190
 319 Asp His Lys Ala Tyr Leu Asp Lys Asn Asn Ala Tyr Pro Val Glu Cys
 320 195 200 205
 323 Trp Ile Pro Asp Pro Ser Arg Asn Glu Asn Thr Arg Tyr Phe Gly Thr
 324 210 215 220

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327 Tyr Thr Gly Gly Glu Asn Val Pro Pro Val Leu His Val Thr Asn Thr
 328 225 230 235 240
 331 Ala Thr Thr Val Leu Leu Asp Glu Gln Gly Val Gly Pro Leu Cys Lys
 332 245 250 255
 335 Ala Asp Ser Leu Tyr Val Ser Ala Ala Asp Ile Cys Gly Leu Phe Thr
 336 260 265 270
 339 Asn Ser Ser Gly Thr Gln Gln Trp Arg Gly Leu Ala Arg Tyr Phe Lys
 340 275 280 285
 343 Ile Arg Leu Arg Lys Arg Ser Val Lys Asn Pro Tyr Pro Ile Ser Phe
 344 290 295 300
 347 Leu Leu Ser Asp Leu Ile Asn Arg Arg Thr Gln Lys Val Asp Gly Gln
 348 305 310 315 320
 351 Pro Met Tyr Gly Met Glu Ser Gln Val Glu Glu Val Arg Val Phe Asp
 352 325 330 335
 355 Gly Thr Glu Gln Leu Pro Gly Asp Pro Asp Met Ile Arg Tyr Ile Asp
 356 340 345 350
 359 Arg Gln Gly Gln Leu Gln Thr Lys Met Val
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 363 <210> SEQ ID NO: 13
 364 <211> LENGTH: 130
 365 <212> TYPE: PRT
 366 <213> ORGANISM: Bacteriophage fr
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 374 Gly Asp Val Lys Val Ala Pro Ser Asn Phe Ala Asn Gly Val Ala Glu
 375 20 25 30
 378 Trp Ile Ser Ser Asn Ser Arg Ser Gln Ala Tyr Lys Val Thr Cys Ser
 379 35 40 45
 382 Val Arg Gln Ser Ser Ala Asn Asn Arg Lys Tyr Thr Val Lys Val Glu
 383 50 55 60
 386 Val Pro Lys Val Ala Thr Gln Val Gln Gly Gly Val Glu Leu Pro Val
 387 65 70 75 80
 390 Ala Ala Trp Arg Ser Tyr Met Asn Met Glu Leu Thr Ile Pro Val Phe
 391 85 90 95
 394 Ala Thr Asn Asp Asp Cys Ala Leu Ile Val Lys Ala Leu Gln Gly Thr
 395 100 105 110
 398 Phe Lys Thr Gly Asn Pro Ile Ala Thr Ala Ile Ala Asn Ser Gly
 399 115 120 125
 402 Ile Tyr
 403 130
 406 <210> SEQ ID NO: 14
 407 <211> LENGTH: 130
 408 <212> TYPE: PRT
 409 <213> ORGANISM: Bacteriophage GA
 411 <400> SEQUENCE: 14
 413 Met Ala Thr Leu Arg Ser Phe Val Leu Val Asp Asn Gly Gly Thr Gly
 414 1 5 10 15
 417 Asn Val Thr Val Val Pro Val Ser Asn Ala Asn Gly Val Ala Glu Trp

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/550,518

DATE: 10/05/2005

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Input Set : A:\sequence listing ascii.txt

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date